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DATE MAILED: 07/09/2002

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/839,173	04/23/2001	Yoshihito Asao	Q63614	4871
· -	90 07/09/2002			
SUGHRUE, MION, ZINN, MACPEAK & SEAS 2100 Pennsylvania Avenue, N.W. Washington, DC 20037			EXAMINER	
			LAM, THANH	
			ART UNIT	PAPER NUMBER
			2834	

Please find below and/or attached an Office communication concerning this application or proceeding.

M

Application No.

09/839,173

Applicant(s)

Asao et al.

Office Action Summary

Examiner

Thanh Lam

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The MAILING DATE of this communication appear	ers on the cover sheet with the correspondence address			
Period for Reply				
A SHORTENED STATUTORY PERIOD FOR REPLY IS SITHE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136 (a). mailing date of this communication.	In no event, however, may a reply be timely filed after SIX (6) MONTHS from the			
- If the period for reply specified above is less than thirty (30) days, a reply with	oly and will expire SIX (6) MONTHS from the mailing date of this communication. se the application to become ABANDONED (35 U.S.C. § 133).			
Status				
1) X Responsive to communication(s) filed on Elect. fi	illed on 5/15/2002 .			
2a) ☐ This action is FINAL . 2b) ☑ This a	action is non-final.			
3) Since this application is in condition for allowand closed in accordance with the practice under Ex	e except for formal matters, prosecution as to the merits is parte Quayle, 1935 C.D. 11; 453 O.G. 213.			
Disposition of Claims				
4) 💢 Claim(s) <u>1-15</u>	is/are pending in the application.			
4a) Of the above, claim(s) <u>4-7, 9, and 12-15</u>	is/are withdrawn from consideration.			
5) Claim(s)	is/are allowed.			
6) X Claim(s) 1-3, 8, 10, and 11	is/are rejected.			
7) Claim(s)	is/are objected to.			
8) Claims	are subject to restriction and/or election requirement.			
Application Papers				
9) \square The specification is objected to by the Examiner.				
10) The drawing(s) filed on is/a	are a) \square accepted or b) \square objected to by the Examiner.			
Applicant may not request that any objection to th	e drawing(s) be held in abeyance. See 37 CFR 1.85(a).			
11) The proposed drawing correction filed on is: a) approved b) disapproved by the Examine				
If approved, corrected drawings are required in rep	ly to this Office action.			
12) \square The oath or declaration is objected to by the Exa	aminer.			
Priority under 35 U.S.C. §§ 119 and 120				
13) Acknowledgement is made of a claim for foreign	n priority under 35 U.S.C. § 119(a)-(d) or (f).			
a) ☑ All b) ☐ Some* c) ☐ None of:				
1. X Certified copies of the priority documents h				
2. Certified copies of the priority documents h				
 3. Copies of the certified copies of the priority application from the International But *See the attached detailed Office action for a list of 	• • • • • • • • • • • • • • • • • • • •			
14) Acknowledgement is made of a claim for domes	tic priority under 35 U.S.C. § 119(e).			
a) \square The translation of the foreign language provision	onal application has been received.			
15) Acknowledgement is made of a claim for domes	tic priority under 35 U.S.C. §§ 120 and/or 121.			
Attachment(s)	_			
1) X Notice of References Cited (PTO-892)	4) Interview Summary (PTO-413) Paper No(s)			
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	5) Notice of Informal Patent Application (PTO-152)			
3) X Information Disclosure Statement(s) (PTO-1449) Paper No(s). 4	6) Other:			

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DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Rejections - 35 USC § 103

- 2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

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3. Claims 1-3,8,10-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kitamura et al. in view of Takahashi et al.

Regarding claims 1 and 8, Kitamura et al. disclose an automotive alternator comprising: an inboard bracket (51) formed in a bowl shape having a cylindrical inboard bearing box in a central portion of an end surface, and an outboard bracket (52) formed in a bowl shape having a cylindrical outboard bearing box in a central portion of an end surface, said brackets being joined with open portions of said bowl shapes facing each other; a shaft (6) rotatably supported in said inboard and outboard brackets by means of inboard and outboard bearings (4,5) disposed inside said inboard and outboard bearing boxes; a pulley (15) fixed to an inboard end portion of said shaft; a stator disposed such that first and second ends thereof are supported in said inboard and outboard brackets; a rotor fixed to said shaft, said rotor being disposed radially inside said stator; a rectifier (14) disposed in said outboard bracket on an outer circumferential side of said outboard bearing box; and a ventilation aperture bored through said outboard bracket on an outer circumferential side of said outboard bearing box, said automotive alternator being constructed such that said rectifier is cooled by allowing air to flow through said ventilation aperture.

Takahashi et al. disclose a bearing (fig. 7D) is constituted by a multi-row bearing having one inner ring (8) and one outer ring (5), a plurality of ball tracks (6,7) disposed axially between said inner ring and said outer ring, and a plurality of balls disposed in each of said ball tracks.

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It would have been obvious to one of ordinary skill in the art at the time the invention was made to replace the outboard bearing of Kitamura et al. by the bearing as taught by Takahashi et al. in order to prevent the creep of the outer board bearing.

Regarding claims 2, and 10, the proposal in combination of Kitamura et al. and Takahashi et al. disclose slip rings for supplying a field current to a field winding in said rotor disposed at an outboard end of said shaft, wherein a diameter of said multi-row bearing and a diameter of said slip rings are constructed so as to be substantially equal.

Regarding claim 3, and 11, the proposal in combination of Kitamura et al.and Takahashi et al. disclose said shaft is supported in said multi-row bearing such that an outboard end surface of said shaft is positioned between an outboard end surface of said multi-row bearing and a center line of an outermost ball track at said outboard end.

Election/Restriction

4. Applicant's election without traverse of claims 1-3, 8, and 10-11 in Paper No. 6 is acknowledged.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thanh Lam whose telephone number is (703) 308-7626. The fax phone number for this Group is (703) 305-3432.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0656.

Thanh Lam

Patent Examiner

July 3, 2002